

## Publication List of Per H. Christensen

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### Computer graphics

#### Proceedings



Per H. Christensen and Daniel Cohen-Or, editors.  
*Rendering Techniques 2003 (Proceedings of the Eurographics Symposium on Rendering 2003)*.  
Eurographics / ACM, June 2003.

#### Dissertation



Per H. Christensen.  
*Hierarchical Techniques for Glossy Global Illumination*.  
Ph.D. dissertation. University of Washington, Seattle, Washington, July 1995.  
(Technical report UW-CSE-95-07-04.)

#### Journal articles, conference papers, course notes, etc.



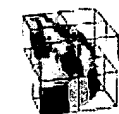
Per H. Christensen.  
*The Brick Map as Geometric Primitive*.  
PhotoRealistic RenderMan Application Note #44.  
Pixar, Emeryville, California, December 2005.



Per H. Christensen.  
*Point-Based Approximate Ambient Occlusion and Color Bleeding*.  
PhotoRealistic RenderMan Application Note #42.  
Pixar, Emeryville, California, November 2005.



Per H. Christensen and Dana Batali.  
*"An Irradiance Atlas for Global Illumination in Complex Production Scenes"*.  
*Rendering Techniques 2004 (Proceedings of the Eurographics Symposium on Rendering 2004)*, pages 133-141.  
Eurographics / ACM, June 2004.



Per H. Christensen.  
*Baking 3D Textures: Point Clouds and Brick Maps*.  
PhotoRealistic RenderMan Application Note #39.  
Pixar, Emeryville, California, May 2004.



Per H. Christensen, David M. Laur, Julian Fong, Wayne L. Wooten, and Dana Batali.  
*"Ray Differentials and Multiresolution Geometry Caching for Distribution Ray Tracing in Complex Scenes"*.  
*Computer Graphics Forum (Eurographics 2003 Conference Proceedings)*, pages 543-552.



Blackwell Publishers, September 2003.

Cyrille Damez, Philipp Slusallek, Bruce J. Walter, Karol Myszkowski, Ingo Wald, and Per H. Christensen.

*Global Illumination for Interactive Applications and High-Quality Animations.*

SIGGRAPH 2003 Course Note #27.

ACM, July 2003.

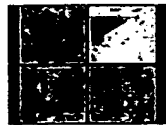


Dana Batali, David M. Laur, Per H. Christensen, Christophe Hery, and many others.

*RenderMan, Theory and Practice.*

SIGGRAPH 2003 Course Note #9.

ACM, July 2003.



Per H. Christensen.

*"Adjoints and Importance in Rendering: an Overview".*

*IEEE Transactions on Visualization and Computer Graphics (TVCG)*, volume 9, number 3, pages 329-340.

IEEE, July 2003.



Per H. Christensen.

*Translucency and Subsurface Scattering.*

PhotoRealistic RenderMan Application Note #37.

Pixar, Emeryville, California, October 2002.



Henrik Wann Jensen, Frank Suykens, Per H. Christensen, and Toshi Kato.

*A Practical Guide to Global Illumination using Photon Mapping.*

SIGGRAPH 2002 Course Note #43.

ACM, July 2002.



Per H. Christensen.

*Ambient Occlusion, Image-Based Illumination, and Global Illumination.*

PhotoRealistic RenderMan Application Note #35.

Pixar, Emeryville, California, April 2002.



Per H. Christensen.

*Caustics.*

PhotoRealistic RenderMan Application Note #34.

Pixar, Emeryville, California, April 2002.



Toshiaki Kato, Hitoshi Nishimura, Tadashi Endo, Tamotsu Maruyama, Jun Saito, and Per H. Christensen.

*"Parallel Rendering and the Quest for Realism: The 'Kilauea' Massively Parallel Ray Tracer".*

In Alan Chalmers et al., *Practical Parallel Processing for Today's Rendering Challenges.*

SIGGRAPH 2001 Course Note #40, pages IV-1 to IV-59. ACM, August 2001.



Henrik Wann Jensen, Frank Suykens, and Per H. Christensen.

*A Practical Guide to Global Illumination using Photon Mapping.*

SIGGRAPH 2001 Course Note #38.

ACM, August 2001.

Per H. Christensen.

*"Faster Photon Map Global Illumination".*



*Journal of Graphics Tools*, volume 4, number 3, pages 1-10. ACM, 1999.  
Reprinted in: Ronen Barzel, editor, *Graphics Tools: The JGT Editors' Choice*, pages 241-251, A K Peters, 2005.



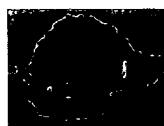
Per H. Christensen and Thomas Driemeyer.  
"Caustics and Global Illumination".  
Chapter 7 of Thomas Driemeyer, *Rendering with Mental Ray*.  
Springer-Verlag, 2000.



Per H. Christensen.  
"Importance for Ray Tracing".  
*Ray Tracing News*, volume 12, number 2.  
ACM, December 1999.



Marc Stamminger, Dan Wexler, Wolfgang Kresse, Nicolas Holzschuch, and Per H. Christensen.  
*Advanced Radiosity: Complex Scenes and Glossy Reflections*.  
Eurographics '99 Tutorial T1.  
Eurographics, September 1999.



Per H. Christensen.  
"Contour Rendering".  
*Computer Graphics*, volume 33, number 1, pages 58-61.  
ACM, February 1999.



Henrik Wann Jensen and Per H. Christensen.  
"Efficient Simulation of Light Transport in Scenes with Participating Media using Photon Maps".  
*Computer Graphics (Proceedings of SIGGRAPH 98)*, pages 311-320.  
ACM, July 1998.



Per H. Christensen.  
"Global Illumination for Professional 3D Animation, Visualization, and Special Effects".  
*Rendering Techniques '97 (Proceedings of the Eighth Eurographics Workshop on Rendering)*, pages 321-326.  
Springer-Verlag, 1997. (Invited paper and talk.)



Per H. Christensen, Dani Lischinski, Eric J. Stollnitz, and David H. Salesin.  
"Clustering for Glossy Global Illumination".  
*ACM Transactions on Graphics (TOG)*, volume 16, number 1, pages 2-33.  
ACM, January 1997.



Per H. Christensen, Eric J. Stollnitz, David H. Salesin, and Tony D. DeRose.  
"Global Illumination of Glossy Environments using Wavelets and Importance".  
*ACM Transactions on Graphics (TOG)*, volume 15, number 1, pages 37-71.  
ACM, January 1996.



Per H. Christensen, Eric J. Stollnitz, David H. Salesin, and Tony D. DeRose.  
"Wavelet Radiance".  
*Photorealistic Rendering Techniques (Proceedings of the Fifth Eurographics Workshop on Rendering)*, pages 295-309.  
Springer-Verlag, 1994.



Per H. Christensen, David H. Salesin, and Tony D. DeRose.  
 "A Continuous Adjoint Formulation for Radiance Transport".  
*Proceedings of the Fourth Eurographics Workshop on Rendering*, pages 95-104.  
 Eurographics, June 1993.

## Images



Per H. Christensen.  
 "Irradiance atlas".  
*Rendering Techniques 2004 (Proceedings of the Eurographics Symposium on Rendering 2004)*, front cover.  
 Eurographics / ACM, June 2004.



Per H. Christensen.  
 "Orange interior".  
*Journal of Graphics Tools*, volume 4, number 3, front cover.  
 ACM, April 2000.

Per H. Christensen.  
 "Foggy Cornell box".  
*Computer Graphics (SIGGRAPH 98 Conference Proceedings)*, back cover.  
 ACM, July 1998.



Per H. Christensen.  
 "Cornell box with two spheres".  
 Anthony Rossano, *Inside Softimage 3D*, page 700.  
 New Riders Publishing, 1998.

Henrik Wann Jensen, Charlotte Manning, and Per H. Christensen.  
 "Dusty room illuminated by sunlight through a stained glass window".  
 Anne M. Spalter, *The Computer in the Visual Arts*, page 258.  
 Addison-Wesley Publishing Co., 1998.



Per H. Christensen.  
 "Interior scene".  
 Eric J. Stollnitz, Tony D. DeRose, and David H. Salesin, *Wavelets for Computer Graphics*, color plate 15.  
 Morgan Kaufmann Publishers, 1996.

## Animations

Per H. Christensen, Henrik Wann Jensen, and Steffen Volz.  
 "The Cornell Box -- Up in Smoke".  
*SIGGRAPH 98 Animation Festival*. ACM, July 1998.

Henrik Wann Jensen, Charlotte Manning, Steffen Volz, and Per H. Christensen.  
 "Underwater Sunbeams".  
*SIGGRAPH 98 Electronic Theater*. ACM, July 1998.

## Computer vision



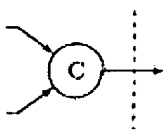
Per H. Christensen and Linda G. Shapiro.  
"Three-Dimensional Shape from Color Photometric Stereo".  
*International Journal of Computer Vision (IJCV)*, volume 13, number 2, pages 213-227.  
 Kluwer Academic Publishers, October 1994.

Per Christensen.  
*Estimating Camera Position to Line Up CG Elements with Live-Action Shots.*  
 ILM Technical Memo 1058.  
 Industrial Light & Magic, San Rafael, California, August 1993. (Not publicly available.)



Per H. Christensen and Linda G. Shapiro.  
"Determining the Shape of Multi-Colored Dichromatic Surfaces using Color Photometric Stereo".  
*Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 767-768.  
 IEEE, June 1993.

## VLSI design



Henrik Hulgaard, Per H. Christensen, and Jørgen Staunstrup.  
"Synthesis of Delay Insensitive Circuits from Verified Programs".  
 In J.-P. Banatre and D. Le Metayer, editors, *Research Directions in High-Level Parallel Programming Languages*, pages 326-337.  
 Springer-Verlag (LNCS #574), 1991.



Henrik Hulgaard and Per H. Christensen.  
Automated Synthesis of Delay-Insensitive Circuits.  
 Masters thesis.  
 Technical University of Denmark, Lyngby, Denmark, August 1990.

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